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REMARKS

Claims 1-7, and 13-21 are pending in this application.

§102 Rejections

Claims 1-4, and 19 are rejected under 35 U.S. C. 102(b) as being anticipated by Nakajima et al. (US 5,397,724). This rejection is respectfully traversed in view of the following remarks.

As the Examiner is well aware a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. See, e.g., *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claims 1 and 19 recited, *inter alia*, the limitation of a phosphorous-doped oxide along substantially vertical edges of the first oxide layer, the first polysilicon layer, the second oxide layer and the second polysilicon layer. The vertical edges of the first oxide layer 6 shown in FIG. 3E of Nakajima et al. is not provided with the phosphorous-doped oxide 30. It is noted that the phosphorous-doped oxide 30 is deposited on the horizontal upper surface of the first oxide layer 6 as depicted in FIG. 3D, and then etched to provide the structure shown in FIG. 3E. Accordingly, by the method disclosed by Nakajima et al., it would be impossible for the vertical edges of the first oxide layer 6 to be provided with the phosphorous-doped oxide 30. As Nakajima et al. fail to teach or suggest each and every element as set forth in the claims 1-4, and 19, withdrawal on this rejection is respectfully requested.

§103 Rejections

Claim 5 is rejected under 35 USC 103(a) as being unpatentable over Nakajima et al., as applied to claims 1-4, and furthering view of Bergemont et al. (US 5, 856,222). This rejection is respectfully traversed.

As mentioned above, Nakajima et al. fail to teach or suggest a phosphorous-doped oxide along substantially vertical edges of the first oxide layer, the first polysilicon layer, the second oxide layer and the second polysilicon layer as recited by claim 1. Bergemont et al. is cited for disclosing in FIG. 5B a second polysilicon layer forming a wordline. It is also noted that Bergemont et al. fail to teach or suggest a phosphorous-doped oxide along substantially vertical

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edges of the first oxide layer, the first polysilicon layer, the second oxide layer and the second polysilicon layer as recited by claim 1. Accordingly, the combined teachings of Nakajima et al. and Bergemont et al. would fail to produce the recited invention of claim 1, from which claim 5 depends. As claim 1 is unobvious in view of the applied art, claim 5 is also unobvious, and as such withdrawal of this rejection is respectfully respected.

Claim 6 is rejected under 35 USC 103(a) as being unpatentable over Nakajima et al in view of Rodder (US 6,329,225). Claim 7 is rejected as being unpatentable over Nakajima et al in view of Rodder as applied to claim 6, and further in view of Sobek et al (US 6,268,624). Claims 20 and 21 are rejected as being unpatentable over Nakajima et al in view of Rodder and Sobek et al. These rejections are respectfully traversed.

As mentioned above, Nakajima et al. fail to teach or suggest a phosphorous-doped oxide along substantially vertical edges of the first oxide layer, the first polysilicon layer, the second oxide layer and the second polysilicon layer as recited by claims 6, 20 and 21. Rodder is cited for disclosing a re-oxidation profile. It is also noted that Rodder fails to teach or suggest a phosphorous-doped oxide along substantially vertical edges of the first oxide layer, the first polysilicon layer, the second oxide layer and the second polysilicon layer as recited by claims 6, 20, and 21. Sobek et al. is cited for teaching that the re-oxidation process results in inter layer encroachment and the development of a cusped structure characterized by a "height" and a "width." It is also noted that Sobek et al. fail to teach or suggest a phosphorous-doped oxide along substantially vertical edges of the first oxide layer, the first polysilicon layer, the second oxide layer and the second polysilicon layer as recited by claims 6, 20 and 21. Accordingly, the combined teachings of Nakajima et al. and Rodder. would fail to produce the recited invention of claim 6. Additionally, the combined teachings of Nakajima et al., Rodder, and Sobek et al. would fail to produce the recited invention of claim 6, from which claim 7 depends, and claims 20 and 21. As claim 6 is unobvious in view of the applied art, claim 7 is also unobvious, and as such withdrawal of these rejections are respectfully respected.

Claim 13 is rejected as being unpatentable over Riedel (US 6,732,241) in view of Nakajima et al and Sobek et al. This rejection is respectfully traversed.

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Riedel is cited for disclosing a computer having a system bus and a flash memory device. As mentioned above, Nakajima et al. fail to teach or suggest a phosphorous-doped oxide along substantially vertical edges of the first oxide layer, the first polysilicon layer, the second oxide layer and the second polysilicon layer as recited by claim 13. Sobek et al. is cited for teaching that the re-oxidation process results in inter layer encroachment and the development of a cusped structure characterized by a "height" and a "width." As mentioned above, it is also noted that Sobek et al. fail to teach or suggest a phosphorous-doped oxide along substantially vertical edges of the first oxide layer, the first polysilicon layer, the second oxide layer and the second polysilicon layer as recited by claim 13. Accordingly, the combined teachings of Riedel, Nakajima et al., and Sobek et al. would fail to produce the recited invention of claim 13. As such, withdrawal of this rejection is respectfully respected.

Claims 14-18 are rejected as being unpatentable over Nakajima et al in view of Wolf et al ("Silicon Processing for the VLSI Era, Vol. 1") and Rodder. This rejection is respectfully traversed.

As mentioned above, Nakajima et al. fail to teach or suggest a phosphorous-doped oxide along substantially vertical edges of the first oxide layer, the first polysilicon layer, the second oxide layer and the second polysilicon layer as recited by claim 14. The reference to Wolf et al. is cited for teaching lateral or angular spread of an ion implant beam, and thus this reference fails to cure the noted deficiency of Nakajima et al. Rodder is cited for disclosing increased trench depths and lower resistance. As mentioned above, it is noted that Rodder fails to teach or suggest a phosphorous-doped oxide along substantially vertical edges of the first oxide layer, the first polysilicon layer, the second oxide layer and the second polysilicon layer as recited by claim 14. Accordingly, the combined teachings of Nakajima et al., Wolf et al, and Rodder would fail to produce the recited invention of claim 14. As claim 14 is unobvious in view of the applied art, claims 15-18 depending therefrom, are also unobvious. Withdrawal of this rejections are respectfully respected.

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The applicants believe that all claims are in condition for allowance. The examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response.

Respectfully submitted,
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